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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/748,163	12/31/2003	Hiroki Mizuno	Q79225	6960

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Washington, DC 20037-3202

EXAMINER
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PERRIN, JOSEPH L

ART UNIT	PAPER NUMBER
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1746

DATE MAILED: 01/09/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/748,163

Applicant(s)

MIZUNO ET AL.

Examiner

Joseph L. Perrin, Ph.D.

Art Unit

1746

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 25 October 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1,4,6 and 11-18 is/are pending in the application.
- 4a) Of the above claim(s) 6 and 13-18 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,4,11 and 12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☒ Interview Summary (PTO-413)  
Paper No(s)/Mail Date 20051213.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Election/Restrictions*

1. Initially, applicant's Election of Species of 22 July 2005 of species (c) included claims 1, 4, 11, 12, 14, 15, 17, and 18 allegedly readable on the elected species. The Examiner disagreed that claims 14, 15, and 17 (and claim 18 dependent on 17) included subject matter readable on the elected species and issued a non-compliant response for electing claims not readable on the elected species. Subsequently on 25 October 2005 applicant submitted arguments traversing the Examiner's position while maintaining claims 14, 15 and 17 read on the elected species without properly electing claims only readable on the elected species. The Examiner again issued a non-compliant response for reasons of same.
2. During a telephone conversation with Mr. Jeffrey A. Schmidt on 13 December 2005 a provisional election was made with traverse to prosecute the invention of elected species (c), with claims 1, 4, 11 & 12 being readable thereon. Affirmation of this election must be made by applicant in replying to this Office action. New claims 14, 15 & 17-18 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention. New claim 16, depending from non-elected claim 14, is also withdrawn for reasons of same. Claims 6 & 13 are also withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

3. Applicant's election with traverse of claims readable on species (c), claims 1, 4, 11 & 12, in view of the telephone conversation above and the reply filed on 25 October 2005 is acknowledged. The traversal is on the ground(s) that the subject matter in claims 14, 15 and 17 read on the elected species of Figures 4 and 8. This is not found persuasive because while the portion of the specification which applicant relies (paragraph bridging pages 20 and 21) is directed to an alternative arrangement of Figure 4 which reads on the second embodiment (Figure 3) the inclusion of such arrangement would read on the non-elected species of Figure 3 for at least reasons of same of the second embodiment (Figure 3). Clearly, there is nothing in Figure 4 of applicant's drawings which includes structure which is capable of "applying a pre-load to the rolling bearing in an axial direction" as in the non-elected embodiment of Figure 3.

The requirement is still deemed proper and is therefore made FINAL.

### ***Response to Arguments***

4. In view of applicant's amendment (canceling claim 3) and drawing correction, the objections of the drawings and claim 3 are withdrawn.

5. In view of applicant's amendment canceling claim 2, the rejection under 35 USC §112, second paragraph is withdrawn.

6. Applicant's arguments filed 02 May 2005 have been fully considered but they are not fully persuasive.

7. Regarding HENRY, applicant argues that HENRY does not disclose "jetting [flowing] the cleaning liquid onto the rolling elements. This is not persuasive for reasons

of record. Firstly, applicant's claims are directed to "flowing" and not "jetting".

Secondly, as noted in the rejection the movement of the bearing relative to the fluid creates a "flowing" of cleaning fluid onto the rolling elements. One having ordinary skill in the art would at once envisage the movement of the bearing components, the movement of the cleaning fluid via circulation and/or ultrasonics would create a "flow" of cleaning fluid through the bearing.

8. Regarding STREUBER, applicant's amendment to claim 1 has rendered this rejection under 35 USC §102(b) moot.

9. Regarding ROBBINS applicant argues that ROBBINS discloses disposing a bearing above the sump fluid and not "immersing the roller bearing...", this is not persuasive because ROBBINS clearly discloses apparatus 20/30 which surrounds the bearing and flows fluid through apparatus 20/30. The sump of ROBBINS has nothing to do with applicant's "immersing" step since fluid flow through 20/30 would clearly cover the bearing during operation and, thus, read on applicant's "immersing" step. This would be well understood by one having ordinary skill in the art.

10. Regarding the §103 rejections over STREUBER, applicant's amendment to claim 1 has rendered this rejection moot.

#### ***Claim Rejections - 35 USC § 102***

11. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

12. Claims 1 & 4 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 2,828,231 to Henry (cited by applicant). Re claim 1, Henry discloses the well known concept of cleaning a roller bearing by rotating one of an inner and outer ring relative to the other and flowing cleaning fluid axially through the roller bearing (see disclosed steps of cleaning an immersed roller bearing by flowing cleaning liquid in the axial direction and one ring of the bearing being fixed (mounted) while the other is rotatable (see Figure 1; column 4, line 60; column 4, lines 53-59). Re claim 4, Henry further discloses applying ultrasonic energy for cleaning (column 3, line 60 *et seq.*).

13. Claims 1 & 11 are rejected under 35 U.S.C. 102(b) as being anticipated by ROBBINS. Re claim 1, ROBBINS discloses cleaning a roller bearing by flowing cleaning fluid through the roller bearing in an axial direction (see Figure 2 & column 4, lines 2-8). Robbins further discloses using a fixed apparatus 20 and rotatable apparatus 30 with the roller bearing therebetween (see Figure 1 and relative associated text) and a closed system and flowing cleaning fluid around and through the roller bearings, which reads on applicant's immersing step (see column 4, lines 2-14). Re claim 11, Robbins further discloses flowing the fluid through the bearing, and subsequently allowing rotation of the bearing for cleaning (see column 4, lines 13-17).

***Claim Rejections - 35 USC § 103***

14. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

15. Claims 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over ROBBINS in view of HENRY or applicant's admitted prior art (AAPA). Recitation of ROBBINS is repeated here from above. ROBBINS does not disclose using ultrasonic cleaning. HENRY teaches that it is well known to provide ultrasonic energy to a roller bearing for improved cleaning (column 1, line 45 *et seq.*). Furthermore, applicant readily admits that it is conventional to use ultrasonic cleaning in cleaning roller bearings (see applicant's Figure 14 and relative associated text). Therefore, the position is taken that a person of ordinary skill in the art at the time the invention was made would have been motivated to modify the cleaning method of ROBBINS with an ultrasonic cleaning step for the purpose of improving cleaning of a roller bearing.

### ***Conclusion***

16. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

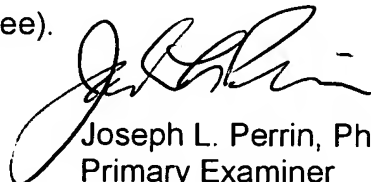
17. A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

18. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph L. Perrin, Ph.D. whose telephone number is (571)272-1305. The examiner can normally be reached on M-F 7:00-4:30, except alternate Fridays.

19. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael E. Barr can be reached on (571)272-1414. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

20. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Joseph L. Perrin, Ph.D.  
Primary Examiner  
Art Unit 1746

jlp